

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1 – 9 (canceled).

10. (currently amended) A method of loading a stent on a delivery catheter, the delivery catheter having a proximal end and a distal end, the method comprising:
providing a stent having a length, at least a portion of the length of the stent being in a radially contracted position, the stent capable of being dilated from the radially contracted position to a radially expanded position, the stent having a first diameter in the radially contracted position and a second diameter in the radially expanded position, the second diameter being greater than the first diameter;

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providing the delivery catheter;
providing a conical sheath disposed about the distal end of the delivery catheter;
sliding the stent in the radially contracted position over and past the conical sheath onto the delivery catheter.

11. (original) The method of claim 10, wherein the step of providing the conical sheath comprises providing the conical sheath formed from a material having a low coefficient of friction.

12. (original) The method of claim 10, wherein the step of providing the conical sheath comprises providing the conical sheath formed from a flexible material.

13. (original) The method of claim 10, wherein the step of providing the conical sheath comprises providing the conical sheath formed from polytetrafluoroethylene.

14. (original) The method of claim 10, further comprising removing the conical sheath after the stent has been mounted on the delivery catheter.

15. (original) The method of claim 10, wherein the step of providing the delivery catheter comprises providing a balloon catheter.

16. (original) The method of claim 10, wherein, in the step of providing the delivery catheter, the delivery catheter has a third diameter, the first diameter being smaller than the third diameter.

17. (original) The method of claim 16, wherein the first diameter is smaller than the third diameter by at least 5%.

18. (original) The method of claim 16, wherein the first diameter is smaller than the third diameter by at least 25%.

19. (original) The method of claim 10, wherein the step of sliding the stent on the delivery catheter comprises placing tension on the distal end of the delivery catheter so that it is pulled into the stent.

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20. (currently amended) A method of loading a stent on a delivery catheter, the delivery catheter having a proximal end and a distal end, the method comprising:

providing a stent having an interior surface and an exterior surface and having a length, at least a portion of the length of the stent being in a radially contracted position, the stent capable of being dilated from the radially contracted position to a radially expanded position, the stent having a first diameter in the radially contracted position and a second diameter in the radially expanded position, the second diameter being greater than the first diameter;

providing the delivery catheter having an exterior surface;
mounting the stent in the radially contracted position directly onto the delivery catheter by imparting sliding movement between the stent and the delivery catheter while the interior surface of the stent and the exterior surface of the delivery catheter are in contact such that the stent is expanded to a delivery position, the stent in the delivery position having a delivery diameter, the delivery diameter being greater than the first diameter and less than the second diameter.

21. (original) The method of claim 20, wherein, in the step of providing the delivery catheter, the delivery catheter has a third diameter, the first diameter and the delivery diameter being smaller than the third diameter.

22. (original) The method of claim 21, wherein the first diameter is smaller than the third diameter by at least 5%.

23. (original) The method of claim 21, wherein the first diameter is smaller than the third diameter by at least 25%.

24. (original) The method of claim 20, wherein, in the step of mounting the stent in the radially contracted position onto the delivery catheter, radial contraction of the delivery catheter occurs.

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25. (currently amended) A method of loading a stent on a delivery catheter, the delivery catheter having a proximal end and a distal end, the method comprising:

providing a stent having a length, at least a portion of the length of the stent being in a radially contracted position, the stent capable of being dilated from the radially contracted position to a radially expanded position, the stent having a first diameter in the radially contracted position and a second diameter in the radially expanded position, the second diameter being greater than the first diameter;

providing the delivery catheter;

providing a conical sheath disposed about the distal end of the delivery catheter;

sliding the stent in the radially contracted position over and past the conical sheath onto the delivery catheter such that the stent is expanded to a delivery position, the stent in the delivery position having a delivery diameter, the delivery diameter being greater than the first diameter and less than the second diameter.

26. (original) The method of claim 25, wherein the step of disposing the conical sheath comprises providing the conical sheath formed from a material having a low coefficient of friction.

27. (original) The method of claim 25, wherein the step of disposing the conical sheath comprises providing the conical sheath formed from a flexible material.

28. (original) The method of claim 25, wherein the step of disposing the conical sheath comprises providing the conical sheath formed from polytetrafluoroethylene.

29. (original) The method of claim 25, further comprising the step of removing the conical sheath after the stent has been mounted on the delivery catheter.

30. (original) The method of claim 25 wherein, in the step of providing the delivery catheter, the delivery catheter has a third diameter, the first diameter and delivery diameter being smaller than the third diameter.

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31. (original) The method of claim 30, wherein the first diameter is smaller than the third diameter by at least 5%.

32. (original) The method of claim 30, wherein the first diameter is smaller than the third diameter by at least 25%.

33. (original) The method of claim 30, wherein, in the step of mounting the stent in the radially contracted position onto the delivery catheter, radial contraction of the delivery catheter occurs.

Claims 34 – 36 (canceled).

37. (currently amended) A kit for the delivery of a stent, the kit comprising:
a delivery catheter having a proximal end and a distal end;
a conical sheath configured to be disposed about the distal end of the delivery catheter; and
a stent having a length, at least a portion of the length of the stent being in a radially contracted position, the stent capable of being dilated from the radially contracted position to a radially expanded position;

wherein the stent is configured to be mounted onto the delivery catheter by fitting sliding the stent in the radially contracted position over and past the conical sheath.

38. (original) The kit of claim 37 wherein the conical sheath comprises a material having a low coefficient of friction.

39. (original) The kit of claim 37 wherein the conical sheath comprises a flexible material.

40. (original) The kit of claim 37 wherein the conical sheath comprises polytetrafluoroethylene.

41. (currently amended) A method of loading a stent on a delivery catheter comprising:

providing a delivery catheter having proximal and distal ends and a distal portion adjacent the distal end, the distal portion having a diameter and having an exterior surface;

providing a stent having a length the stent having an interior surface and an exterior surface;

radially compressing at least a portion of the stent from a pre-compression diameter to a post-compression diameter, the post-compression diameter being less than the diameter of the distal portion of the stent delivery catheter; and

mounting the stent in the post-compression diameter onto the distal portion of the delivery catheter without further compressing the stent such that the stent is expanded during mounting to a delivery position, and such that during mounting of the stent, the stent slides with respect to the delivery catheter while the interior surface of the stent and the exterior surface of the delivery catheter are in contact.

42. (previously presented, Amendment of 01/30/03) The method of claim 41, wherein the step of providing the delivery catheter comprises providing a balloon catheter.

43. (previously presented, Amendment of 01/30/03) The method of claim 41, wherein the mounting step further comprises providing a means for radial containment of the stent.

44. (previously presented, Amendment of 01/30/03) The method claim 41, wherein, in the step of providing the stent, the stent comprises metal.

45. (previously presented, Amendment of 01/30/03) The method of claim 41, wherein the step of radially compressing at least a portion of the stent comprises radially compressing the stent along its entire length.

46. (previously presented, Amendment of 01/30/03) The method of claim 41, wherein, in the step of radially compressing at least a portion of the stent, the stent is radially compressed by forcing the stent into contact with a forming stem.

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47. (new) The method of claim 10, wherein the step of sliding the stent on the delivery catheter comprises maintaining the stent in a stationary position while moving the delivery catheter.

48. (new) The method of claim 10, wherein the step of sliding the stent on the delivery catheter comprises maintaining the delivery catheter in a stationary position while moving the stent.

50. (new) The method of claim 47, further comprising removing the conical sheath after the stent has been mounted on the delivery catheter.

51. (new) The method of claim 47, wherein the step of sliding the stent on the delivery catheter comprises placing tension on the distal end of the delivery catheter so that it is pulled into the stent.

52. (new) The method of claim 47, wherein, in the step of sliding the stent onto the delivery catheter, radial contraction of the delivery catheter occurs.

53. (new) The method of claim 48, further comprising removing the conical sheath after the stent has been mounted on the delivery catheter.

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54. (new) The method of claim 48, wherein the step of sliding the stent onto the delivery catheter is such that the stent is expanded to a delivery diameter being greater than the first diameter and less than the second diameter.

55. (new) The method of claim 48, wherein, in the step of sliding the stent onto the delivery catheter, radial contraction of the delivery catheter occurs.